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wherein the pretreatment prevents binding of equine antibodies to those antigens common to all *Sarcocystis* spp. which can be present in the sample. This method is disclosed in Provisional Patent Application Serial No. 60/120,831, filed on February 19, 1999, now U.S. Serial No. 09/506,630, filed February 18, 2000, which is hereby incorporated herein by reference.—

In the Claims:

Please cancel Claim 31.

Please amend Claims 29, 30, 32, 33, 34, and 35 as follows.

-29-(Amended)

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A method for producing an antibody against a Sarcocystis neurona antigen selected from the group consisting of a 16 ± 4 kDa antigen and a 30 ± 4 kDa antigen comprising:

- (a) providing a microorganism containing a DNA encoding a fusion polypeptide in which a Sarcocystis neurona antigen selected from the group consisting of the 16 ±4 kDa antigen and the 30 ±4 kDa antigen is fused to a polypeptide which enables isolation of the fusion polypeptide by affinity chromatography;
- (b) culturing the microorganism in a culture to produce the fusion polypeptide from the DNA;

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(c) isolating the fusion polypeptide from the culture by affinity chromatography;

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- (d) admixing the fusion polypeptide isolated by the affinity chromatography with an adjuvant to produce an admixture;
- (e) immunizing a mammal with the admixture containing the fusion polypeptide and the adjuvant which causes the mammal to produce antibodies against the fusion polypeptide; and
- (f) removing serum from the immunized mammal and isolating the antibodies from the serum to produce the antibody against the Sarcocystis neurona antigen selected from the group consisting of the 16 ±4 kDa antigen and the 30 ± 4 kDa antigen.

-30-(Amended)

A method for producing a monoclonal antibody against a Sarcocystis neurona antigen selected from the group consisting of a 16 ±4 kDa antigen and a 30 ±4 kDa antigen comprising:

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(a) providing a microorganism containing a DNA encoding a fusion polypeptide in which a Sarcocystis neurona antigen selected from the group consisting of the 16 ±4 kDa antigen and the 30 ±4 kDa antigen is fused to a/polypeptide which enables isolation of the fusion polypeptide by affinity chromatography;

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- (b) culturing the microorganism in a culture to produce the fusion polypeptide from the DNA;
- (c) isolating the fusion polypeptide from the culture by the affinity chromatography;
- (d) admixing the fusion polypeptide isolated by the affinity chromatography with an adjuvant to produce an admixture;
- (e) inoculating mice with the admixture containing the fusion polypeptide and the adjuvant which causes the mice to produce antibodies against the fusion polypeptide;
- (f) removing the spleens from the mice which produce the antibodies against the fusion polypeptide;
- (g) removing spleen cells from the spleens and mixing the spleen cells from the spleens with mouse myeloma cells to produce a mixture of fused cells consisting of spleen cells fused to myeloma cells, the spleen cells, and the myeloma cells;
- (h) selecting the fused cells on cell culture medium in which the fused cells can grow but in which the spleen cells and the myeloma cells cannot grow; and
- (i) screening the fused cells for fused cells which produce the monoclonal antibody against the Sarcocystis neurona antigen selected from the group consisting of the 16 ± 4 kDa antigen and the 30 ± 4 kDa antigen to produce the monoclonal antibody.

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-32-(Amended)

The method of Claim 31 wherein the polypeptide comprising the fusion polypeptide is protein A and the affinity chromatography comprises an IgG-linked resin.

-33-(Amended)

The method of Claim 31 wherein the polypeptide comprising the fusion polypeptide is polyhistidine and the affinity chromatography comprises a Ni^{2+} resin.

34-(Amended)

The method of Claim 31 wherein the polypeptide comprising the fusion polypeptide is glutathione Stransferase and the affinity chromatography comprises a glutathione Sepharose 4B regin.

-35-(Amended)

The method of Claim 31 wherein the polypeptide comprising the fusion polypeptide is a maltose binding protein and the affinity chromatography comprises an amylose resin.